

**CLAIMS**

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1. A pharmaceutical combination or composition for inhalation a fixed  
5 combination (A) L-lysine N-acetylcysteinate and (B) a bronchodilator agent  
for simultaneous, sequential or separate administration by inhalation in the  
treatment of an inflammatory or obstructive respiratory disease.
  2. The composition or combination of claim 1, wherein the bronchodilator  
agent belongs to the class of  $\beta$ 2-mimetics.
  - 10 3. The composition or combination of claim 1, wherein the bronchodilator  
agent belongs to the class of long-acting  $\beta$ 2-mimetics.
  4. The composition or combination of claim 3, wherein the bronchodilator  
agent is formoterol or a solvate thereof, or salmeterol or a salt thereof, or  
mixtures thereof.
  - 15 5. The composition or combination of claim 2, wherein the bronchodilator  
agent is a short-acting  $\beta$ 2-mimetic such as but not limited to salbutamol,  
terbutaline, pirbuterol, fenoterol, tulobuterol, and mixtures thereof.
  6. The composition or combination of claim 1, wherein the bronchodilator  
agent belong to the class of anticholinergics.
  - 20 7. The composition or combination of claim 6, wherein the bronchodilator  
agent is tiotropium, oxitropium, ipratropium and mixtures thereof.
  8. The composition or combination of claim 1, wherein the weight ratio of (A)  
to (B) is from 1:10 to 1:10 000, preferably from 1:100 to 1:2000, most  
preferably from 1:200 to 1:1000.
  - 25 9. The composition or combination of claim 1, wherein the composition or  
combination contained in addition of (A) and (B) at least one  
pharmaceutically acceptable carrier.
  10. The composition or combination of claim 1 suitable for an inhalable dry  
powder inhaler comprising micronized particles of (A) L-lysine N-  
30 acetylcysteinate and (B) micronized particles of (B) a bronchodilator agent,  
advantageously mixed with one or more acceptable excipients(s)

11. The composition or combination of claim 10, wherein the composition or combination is in a form suitable for inhalation through a monodose inhaler device.
12. The composition or combination of claim 10, wherein the composition or combination is in a form suitable for inhalation through a multiple-dose inhaler.
13. The composition or combination of claim 10, containing in addition to (A) and (B) at least one saccharide.
14. The composition or combination of claim 13, where the saccharide is lactose.
15. The composition or combination of claim 1, wherein the composition or combination is an inhalable pressurized metered dose inhaler.
16. The composition or combination of claim 15, wherein the composition or combination contains in addition to (A) and (B) at least a propellant wherein (A) and (B) are either dissolved or dispersed.
17. The composition or combination of claim 15, wherein the propellant is chlorofluorocarbon derivative.
18. The composition or combination of claim 15, where the propellant is a hydrofluorocarbon derivative.
19. The composition or combination of claim 1, wherein the composition or combination is an inhalable nebulizable composition or combination comprising a solution and/or a dispersion of (A) and (B) in an aqueous medium.
20. The composition or combination of claim 1, which is a dry powder inhaler in a capsule containing from 2 to 20  $\mu\text{g}$  of L-lysine N-acetylcysteinate and from 2 to 20  $\mu\text{g}$  of formoterol or a solvate thereof.
21. The composition or combination of claim 1, which is a dry powder inhaler in a capsule containing from 2 to 20  $\mu\text{g}$  of L-lysine N-acetylcysteinate and from 10 to 100  $\mu\text{g}$  of salmeterol or a solvate thereof.
22. The composition or combination of claim 1, which is a dry powder inhaler in a capsule containing from 2 to 20  $\mu\text{g}$  of L-lysine N-acetylcysteinate and from 10 to 100  $\mu\text{g}$  of tiotropium or a solvate thereof.

23. A method of treating an inflammatory or obstructive respiratory disease which comprises administering to a subject in need of such treatment effective amounts of (A), as defined in claim 1, and (B) as defined in claim 1.